The Behavior Analyst 1986, 9, 231–237 No. 2 (Fall)

In Response

Left and Right Paths for Behaviorism's Development

Arthur W. Staats
University of Hawaii

A number of issues are raised by Epstein's (1984, 1985) arguments concerning the need for a new field that he calls praxics. This analysis will consider the general issue of establishing behavioral organizations separate from psychology (referring also to Fraley & Vargas, 1986), focusing on *separatism* as a characteristic of sciences that are still in the pre-unified state of development (see Minke, in press a; Staats, 1975, 1981, 1983a).

To begin with, Epstein has said that we behaviorists should establish a new science of behavior that will, on the one hand, break free of behaviorism and, on the other hand, that "must also separate from psychology" (Epstein, 1985, p. 269). We should be clear about the alternatives involved here, as well as what the problems are that create the impetus for the actions suggested. What Epstein has set forth is a philosophical statement that describes a path for behaviorism to take in its development. Such statements are important because, when they are followed, they involve the commitment of large quantities of scientific resources, and this affects the nature of the science. The issues involved here call for an informed process of decision, and I write this to suggest an alternate path of development.

Let me provide some context for the point that I wish to make by first indicating that Epstein's separatism will probably be responded to favorably by a certain proportion of behaviorists because the basic character of separatism has been a part of behaviorism since its inception. In fact, separatism is presently very much alive for many radical behaviorists. To elaborate, the rejection of large parts of traditional psychology was integral to Watson's behaviorism, a prominent plank of which consisted of what behaviorism should not be, especially the study of the mind. Of course, his behaviorism did more than reject things for study. Watson had a positive program of study, as we all know, the study of behavior and the environmental variables of which behavior is a function.

In the present context, however, it is important to make explicit that Watson's rejection of mentalism came to be part of a philosophical framework that proscribed certain types of concepts, certain types of problems of study, certain methodologies, and certain findings. When one considers all that is proscribed, it turns out that it includes a large portion, perhaps most, of the interests of nonbehavioral psychology. That, naturally, has created massive barriers with respect to establishing any relationship between behavioristic knowledge and the knowledge produced by traditional psychology. As the philosophy called unified positivism has indicated (Staats, 1983a, in press d, in press e), this has been a two-way street: The separatism that has been described above is characteristic of psychology in general—traditional psychology on its side has also rejected behaviorism. As I will indicate further on, moreover, this characteristic of rejecting whatever is not indigenous to one's own approach acts within, as well as between, the major divisions of behavioral and nonbehavioral psychology.

The point here, however, is to indicate that Epstein's position draws this very traditional characteristic of behaviorism (and psychology, in general) to its logical extreme. He calls for more than theoretical, methodological, and knowledge separation. Epstein's proposal adds to those

Reprints may be obtained from the author, Department of Psychology, University of Hawaii, Honolulu, HI 96822.

an official organizational (sociological) separation that would enhance already existent divisions.

THE LEFTIST ALTERNATIVE

If praxics be considered the conservative right—the carrying to the extreme of an existing characteristic of behaviorism—then we might also ask if there is a leftward path for development. Let me suggest that there is and that this is the path that behaviorism should follow. The path that I wish to indicate is the opposite of separatism—it is the path of unification.

This calls for a bit of explanation, since unification might be greeted by some behaviorists as a return to traditional mentalism, as exemplified by some contemporary cognitive-behavioral approaches. Thus, let me say that I do not hold that cognitive-behavioral approaches constitute a productive alternative for the development of behaviorism. Nor do the cognitive-behavioral approaches constitute what I would consider to be a unifying behavioristic approach—one that unifies nonbehavioristic elements of knowledge within a behavioristic framework of principles. In my view, cognitive-behavioral approaches are eclectic. They employ a few behavioristic principles combined with various cognitive concepts. They do not make those cognitive concepts behavioral in nature. The methodology is not clear or consistent; the substance is not constructed systematically within a set of behavioral principles and a set of methodological principles. The general approach involved simply borrows and uses some behavioral principles and concepts, but does not constitute one of the behaviorisms (Minke, in press a). It may be added that eclectic positions, such as this one, typically involve incorporating what has been done, rather than projecting new developments and new directions.

The path I am going to suggest for behaviorism's development is that of the philosophy of unified positivism; the vehicle for this development is that of paradigmatic behaviorism. Paradigmatic behaviorism is a true behaviorism, based on a consistent set of methodological principles, a set of explicit behavioral principles, an overarching theoretical formulation, and a philosophy of science that characterizes psychology as a disunified science. These developments have already inspired a good deal of research, which has been incorporated into contemporary behaviorism, and have prompted new directions for further growth. In support of this, see, for example, Burns (1980, 1985), Evans (in press), Leduc and other members of *L'Association Quebecoise pour l'Avancement du Behaviorisme Paradigmatique* (Herry & Leduc, 1982; Leduc, 1976, 1985; Levesque & Leduc, 1982), Minke (in press a, in press b), and Staats (1963, 1968, 1971, 1975, 1983a), to name some of the works of large scope or general portent.

It is central to the purposes of this note to indicate that paradigmatic behaviorism contains as one of its parts a philosophy of science—called unified positivism—that is new (see Minke, in press a; Staats, in press b, in press c, in press d, in press e, and the works cited above). This philosophy of science has been developed systematically, based upon several decades of work, using materials from the contemporary history of science, the sociology of science, and the philosophy of science. The second generation of behaviorism was, in contrast, generally based on the philosophy of science that was available during its formative period—primarily logical positivism and operationism. This latter philosophy of science took the natural sciences as its model—that is the natural sciences subsequent to their development as unified sciences. For this reason, this philosophy of science does not include an understanding of the special characteristics of the disunified science—which is what the behavioral sciences are today. This is a basic deficit, with many ramifications for a philosophy that purports to pertain to psychology. Unified positivism, however, has constructed a philosophy of the

disunified science, providing a basis for understanding the nature of psychology and for setting forth a program of work to establish unity in behaviorism and in psychology in general. Of special import for the present paper, unified positivism is opposed to any movement to withdraw behaviorism from psychology.

This view stems from its basic analysis. Unified positivism says that one of the dimensions of progress of science is that of unification. Unification (and consensus) takes place on various dimensions, including integration of diverse empirical methodologies, theories, and findings. Unification in psychology also requires methodological advances, one being explication of the characteristics needed for constructing theory of large scope. The major behaviorisms have had unification as an aim, but have not systematically stated their methodology of theory construction (see Minke, in press a; Staats, 1981, 1983a) by which their approaches could be applied to the general domain of psychology. Paradigmatic behaviorism has presented such a methodology (Staats, 1975, 1981, 1983a, 1983b). The approach is not eclectic, for it involves consistency and tight reasoning throughout, based on behavior principles and methods. Moreover, it does not involve wholesale acceptance and utilization of elements of knowledge in nonbehavioral psychology—only those that can be reformulated and made to fit. One of the important characteristics of a unifying theory in psychology is to have criteria for selection and rejection that do justice to other knowledge pools, while retaining the internal consistency and tight reasoning demanded of good theory. In any event, the approach's methods and findings stress that there is much potential unity in our science that remains unseen because our field has worked and organized itself according to the characteristics of a disunified science, without a philosophy of science, methodology, and theoretical structure to guide its advancing unification. The approach's philosophy stresses also that it takes great efforts to create unified knowledge within a disunified science, and the philosophy indicates the various paths for these efforts to take, in creative works that will require the efforts of many researchers, theorists, and philosophers.

Of central importance to this analysis is the systematically presented argument that there are differences in the extent to which the different sciences have attained unification of methodology, theory, findings, and philosophy. The natural sciences are immeasurably more advanced in this respect than is psychology and the other behavioral sciences. The analysis states that progress is to be expected in unification, as it is in other characteristics of science. The characteristics of the disunified science, however, militate against making that progress, or indeed against making the necessary investment by which that progress can be attained. One of the characteristics of the disunified science is its movement towards greater and greater separatism, along various lines. Praxics as an incipient philosophy and movement may be considered to be in the tradition of the separatism of the disunified science. In the present view, this emphasizes a primitive feature of behaviorism and of psychology. We should realize that despite the great power of behaviorism, it too has been a prisoner limited by the walls of the scientific philosophy of its time. That philosophy was based on the natural sciences which themselves had gone through their unifying revolutions long before the philosophy of science was there to take note of how important the revolution was or how to achieve it (see Staats, 1983a). Because behaviorism has been based on an incomplete philosophy, drawn from the natural sciences, it has not solved the problem of separatism and fragmentation any better than the rest of psychology. We can see symptoms of this failure in the growing separation between human operant research and nonhuman operant research (see Perone, 1985). As another example, the separations between the second-generation behaviorisms of Skinner, Hull, Tolman, and others, divided the field for many years. A

more recent separation has been characterized between radical behaviorism and paradigmatic behaviorism (Staats, 1984). Each of these examples involves disadvantages for behaviorism.

The title of the present paper says there are two paths that can be taken. The path to the right is the path that emphasizes what already exists in the field, that is, disunity and separatism. The path to the left, the path that would introduce a new development, is the proposed investment in unification.

DISCRIMINATORY PRACTICES: ONE DYNAMIC FOR SEPARATION

The above analysis was composed to address the issue of whether or not to found praxis as an organization separate from behaviorism and separate from psychology. Praxics, however, is only one proposal that has been drawn from the same general context of problems and philosophy. Fraley and Vargas (1986), as another example, have presented an analysis of why radical behaviorism should establish itself as a separate discipline (i.e., "behaviorology"). It is important also in the present paper to address their approach, because unified positivism and paradigmatic behaviorism are concerned with the general problem of the relationship between behaviorism and psychology. This requires some consideration of the underlying reasons for the various secessionist opinions that abound among the members of the Association for Behavior Analysis.

Fraley and Vargas, I believe, described how many radical behaviorists feel about the world of psychology within which they operate. They express strong discontent with the manner in which behaviorists are treated by nonbehavioral psychology. Behaviorists are seen to be denied their due with respect to the resources of the science and profession. That includes denial of grant funding, sufficient faculty positions in universities, and the power to reproduce their kind, as well as denial of due status and even credit for the creation of new scientific knowledge. Fraley and Vargas make a central point of the latter, giving examples of concepts that have been presented by Skinner that have later appeared in nonbehavioral works, with no indication of the earlier formulations.

This point is worth discussing further because it can be used to illustrate the broader perspective that is provided by paradigmatic behaviorism's philosophy of unified positivism. The point is that what Fraley and Vargas see as a specific discriminatory policy, directed against radical behaviorists, is actually a general characteristic of psychology, including radical behaviorism. Noncitation of the origin of materials developed within competing approaches is typical of the disunified science, where there is consensus on almost nothing, and where the adherents of each approach attempt to enhance their view and defeat all others. It is important to realize that the same characteristic existed in the early natural sciences—where there were almost as many different approaches as there were scientists and where scientists had to struggle to retain possession on their own discoveries. Rules regarding appropriate methods of citation only emerge when the science has gained some consensuality of methods, theories, findings, philosophy, organizations, and so on (see Staats, 1983a). The behaviorist who feels beleagured should realize that the same examples of noncitation and nonrecognition exist among psychoanalysts, social psychologists, child psychologists, cognitive psychologists, and so on. There is as much noncitation within each genre as there is between any two of them. Thus, behaviorists, whose experience has been in a disunified science, display the same methodology of noncitation, even for different variants of behaviorism, as can be shown in example after example (see Staats, 1983a). In other words, discriminatory practices are a common (although implicit) methodology in the disunified science with respect to such matters as the citation of materials originated within competitive approaches. This methodology is displayed by all scientists in the disunified science, including behariorists.

Why is it important to make this point here? Because the nature of the problem

must be acknowledged before one can carry out a solution. When the problem is considered as a type of discrimination against behaviorists, a reasonable solution is a separate discipline where one can be insulated against discriminatory actions. But, when the problem is seen as the lack of development of the science, the solution is to work to advance the science's methodology generally (see Staats, 1983a). The present view is that the problem stems from an atavistic methodology, primitive because it interferes terribly with the communication upon which science depends, communication that would enable it to establish some unity of its knowledge. If this analysis is true, then establishing separate organizations—and there have been proposals and actions to do this other than those put forth by behaviorists—would simply exacerbate the underlying problem of the disunified science. The analysis says, rather, that behaviorists should become interested in working to improve the methodology involved, an achievement that would be significant for all of psychology.

BEHAVIORISM HAS FAILED: ANOTHER DYNAMIC FOR SEPARATION

One other part of the Fraley and Vargas (1986) analysis requires comment, since it helps us understand the attempts to change our organizational structure. That is, we can see a major reason for the proposed separatistic notions in Epstein's comment that "The movement [behaviorism] has failed . . ." (1985, p. 269). Fraley and Vargas display the same pessimism, as we can see from the following statements.

> Our discipline needs a term descriptive of our science in its broad sense, and that term is not "psychology" . . . . We would never win the battle over what it denotes . . . . The custody fight is lost already. And in continuing to struggle for it, we could easily lose our identity. (pp. 24–25)
>
> Both Morse and Bruns (1983) and Branch and Malagodi (1980) point out that in many cases no amount or kind of graduate training prevents the drift toward mentalism in a faculty member subjected to the continuous audience control of a cognitive community. (p. 36)

These statements amount to a confession of defeat—an admission that radical behaviorism has lost the battle to establish itself as a general psychology. This state of affairs may indeed be due completely to a majority group in psychology that is incapable of recognizing scientific truth and is dedicated to discriminating against behaviorists. But, perhaps there is another reason why radical behaviorism has failed to penetrate and influence psychology in a more definitive way. Perhaps the radical behaviorist is not able to confront and deal productively (in a behavioristic framework) with the problems that are of interest to the nonbehavioral psychologist. Perhaps the radical behaviorist is not able to offer something to the nonbehaviorist, in the latter's areas of concern, that is an improvement over what the nonbehavioral psychologist has already. Perhaps radical behaviorists experience a loss in influence because many times they reject the legitimacy of the nonbehaviorists' problems out of hand, on a massive basis, without adequate explanation. When this occurs, the radical behaviorist loses credibility. One thing that I learned in my more than thirty years as a contributing behaviorist is that rejection of the legitimacy of problems may be a cop-out and definitely is perceived that way, unless there is adequate explanation, which the generic and simple disqualification as "mentalistic" does not constitute.

My own experience is that when one has a conceptual-methodological-philosophical framework that is capable of dealing with the particular problem in a better manner than the nonbehavioral psychologist, then there is no difficulty at all in maintaining one's position, and frequently one can in the process advance behavioral principles into new territory. After all, the first generation behaviorists did so in Watson's time. The second-generation behaviorists did it too. I remember very well being the first behaviorist at Arizona State University, amongst a group of nonbehavioral, nonexperimental psychologists. It was possible to advance behaviorism in that situation by working within a behavioral system that was better than that which could be mus-

tered by the opposition. That was a struggle many of us faced in my generation. Although the struggle is still there, the scene today is infinitely more propitious, if one has the methodological *and theoretical* tools to handle the problems of contemporary interest. After all, several thousand behaviorists now exist who have many resources. If they cannot make inroads into psychology, something more than lack of opportunity must be considered to be a possible cause. In my opinion, what is lacking is an agenda, and a framework for solving the problems that have not yet been confronted.

THE PROBLEM IS SCIENTIFIC: FORWARD TO THE NEW REVOLUTION

I will now make a suggestion that no doubt will be controversial. It is that adoption of paradigmatic behaviorism will provide a framework that will allow the behaviorist to confront contemporary problems of psychology in general with productivity and confidence. I have not yet met a legitimate problem in psychology—and there is an infinite number yet to be confronted—that I could not handle better within a paradigmatic behavioristic framework than could be handled within one of the traditional frameworks. I still have that confidence, much more solidly now, because of the many experiences I have had that demonstrate the strength of the approach.

The general point is that Fraley and Vargas, and Epstein, and others want to solve sociologically—through organization—what is really a scientific problem, that is, a problem of advancing behaviorism methodologically, conceptually, and empirically to meet the challenge. I do not believe behaviorism should retreat to an insular state. I believe that it should move forward instead. That position is in the tradition of behaviorism. Watsonian psychology was a revolution that aimed to take over traditional psychology. It made inroads in that direction, but that first-generation behaviorism did not have the scientific strength by which to accomplish the task. It had certain powerful things to offer, and it provided the basis for the second generation behavioristic theories that focused research on the animal laboratory. The current second-generation behaviorism has much greater power, and we elaborated it in a burst of expansion in establishing the fields of behavior modification, behavior therapy, behavior analysis, and so on. The excitement of the present era has been largely due to behaviorism's ability to enter into problem areas in psychology that formerly were the province of nonbehaviorists. As Fraley and Vargas (1986) note, radical behaviorists in this period "have accomplished quite a bit already: journals, a professional organization, thriving regional organizations, the initial machinery to credential behavior analytic expertise, a name (behavior analysis) for our scientific engineering efforts" . . . (pp. 25–26). But the second generation of behaviorism has only so many new advantages to exploit, as was the case with the first generation. I believe that what is being experienced is stultification. The basic foundation of the field is accepted as a given by radical behaviorists. And this foundation is looked to as the guide for the entrance into new areas of study, which has meant there is stultification with respect to making further advancements into the problem areas of nonbehavioral psychology. The pessimism that some radical behaviorists are experiencing stems from the limitations imposed by the particular behaviorism used, including its characteristic of separatism from anything that is not its own. This separatism has led to an inward-looking development, shutting off the impetus to deal with pyschology's problems that at one time came from outside, including that contributed by paradigmatic behaviorism (see Staats, 1984, for additional discussions).

I believe that general behaviorism, by opening itself to a new interest in psychology's problems, rather than by retreating from them, could undergo a new period of expansion and revitalization. Paradigmatic behaviorism and its philosophy of unified positivism could play an important role in such a development, for it offers directions, methods, and a

conceptual structure that have been formulated for the purpose of dealing broadly with the problem areas of psychology. I would recommend the aggressive offensive that paradigmatic behaviorism's strategic plan indicates, rather than the withdrawal into a narrowing circle that is suggested by radical behaviorism's separatistic defensiveness.

For those who are interested in these potentialities, let me emphasize that the fruits of paradigmatic behaviorism and its philosophy cannot be gleaned from such a brief comment as this. The concerned behaviorist will have to become conversant with the various works of the approach, which offer a variety of new tools that, while strictly behavioristic, are not now part of the lexicon of radical behaviorism. Only in this manner can the potentialities of this framework be utilized in a heuristic way, in expanding the purview and power of behaviorism.

REFERENCES

Burns, G. L. (1980). Indirect measurement and behavioral assessment: A case for social behavioral psychometrics. *Behavioral Assessment, 2,* 196–206.

Burns, G. L. (1985, May). *Paradigmatic behaviorism's personality conception: Implications for behavioral analysis and assessment.* Paper reported at the meeting of the Association for Behavior Analysis, Columbus, OH.

Epstein, R. (1984). The case for praxics. *The Behavior Analyst, 7,* 101–119.

Epstein, R. (1985). Further comments on praxics: Why the devotion to behaviorism? *The Behavior Analyst, 8,* 269–271.

Evans, I. M. (Ed.). (in press). *Paradigmatic behavior therapy: Critical perspectives on applied social behaviorism.* New York: Springer.

Fraley, L. E., & Vargas, E. A. (1986). Separate disciplines: The study of behavior and the study of the psyche. *The Behavior Analyst, 9,* 47–59.

Herry, Y., & Leduc, A. (1982). La privation et les trois fonctions des stimuli selon la theorie de l'apprentissage d'Arthur Staats. *La Technologie du Comportement, 6,* 161–175.

Leduc, A. (1976). Le behaviorisme et l'autonomie de la personne. *Revue de Modification du Comportement, 6,* 1–16.

Leduc, A. (Ed.). (1984). *Recherches sur le behaviorisme paradigmatique ou social.* Brossard, Quebec: Editions Behaviora.

Levesque, M., & Leduc, A. (1982). L'apprentissage du comportement anormal dans le cadre du behaviorisme social de Staats. *Apprentissage et Socialisation, 5,* 196–209.

Minke, K. A. (in press a). A comparative analysis of modern general behaviorisms: Unification by generational advance. In A. W. Staats & L. P. Mos (Ed.), *Annals of theoretical psychology* (Vol. 5). New York: Plenum.

Minke, K. A. (in press b). Foundations of a developing paradigm: Implications for behavioral engineering. In I. M. Evans (Ed.), *Paradigmatic behavior therapy: Critical perspectives on applied social behaviorism.* New York: Springer.

Staats, A. W. (with contributions by C. K. Staats). (1963). *Complex human behavior.* New York: Holt, Rinehart and Winston.

Staats, A. W. (1968). *Learning, language, and cognition.* New York: Holt, Rinehart and Winston.

Staats, A. W. (1971). *Child learning, intelligence and personality.* New York: Harper and Row.

Staats, A. W. (1975). *Social behaviorism.* Homewood, IL: Dorsey Press.

Staats, A. W. (1981). Paradigmatic behaviorism, unified theory, unified theory construction methods, and the zeitgeist of separatism. *American Psychologist, 36,* 240–256.

Staats, A. W. (1983a). *Psychology's crisis of disunity: Philosophy and method for a unified science.* New York: Praeger.

Staats, A. W. (1983b). Paradigmatic behaviorism: Unified theory for social-personality psychology. In L. Berkowitz (Ed.), *Advances in experimental social psychology (vol. 16). Theorizing in social psychology: Theoretical perspectives* (pp. 125–179). New York: Academic Press.

Staats, A. W. (1984). *Operant behaviorism and paradigmatic behaviorism: Mutually exclusive, or interacting allies?* Paper presented at the meeting of the Association for Behavior Analysis, Nashville.

Staats, A. W. (in press a). Behaviorism with a personality: The paradigmatic behavioral assessment approach. In R. O. Nelson & S. C. Hayes (Eds.), *Conceptual foundations of behavioral assessment.* New York: Guilford Press.

Staats, A. W. (in press b). Paradigmatic behavior therapy: A unified, heuristic theory for the third-generation. In I. M. Evans (Ed.), *Paradigmatic behavior therapy: Critical perspectives on applied social behaviorism.* New York: Springer.

Staats, A. W. (in press c). Paradigmatic behaviorism, unified positivism, and paradigmatic behavior therapy. In D. Fishman, R. Rotgers, & C. Franks (Eds.), *Paradigms in behavior therapy.* New York: Springer.

Staats, A. M. (in press d). Unified positivism: Philosophy for a unification psychology. In A. W. Staats & L. Mos (Eds.), *Annals of theoretical psychology* (Vol. 5). New York: Plenum.

Staats, A. W. (in press e). Unified positivism: Philosophy for a unification psychology. In W. Bradley, M. Hyland, H. V. Rappard, & A. W. Staats (Eds.), *Studies in theoretical psychology.* Amsterdam: North Holland.

Staats, A. W., & Heiby, E. M. (1985). The paradigmatic behaviorism theory of depression. In S. Reiss & R. Bootzin (Eds.), *Theoretical issues in behavior therapy* (pp. 279–330). New York: Academic Press.